

S. Little
*7-12-01*PATENTIN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Patent Application of : Group Art Unit: 3752
Stephen J. Meyer et al. :
Appln. No.: 09/196,680 : Examiner: Kim, C.
Filed: November 20, 1998 :
For: ORDINARY HAZARD :
EXTENDED COVERAGE : Attorney Docket
SIDEWALL SPRINKLERS : No. 5903-157
AND SYSTEMS

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Group 3700

REQUEST FOR RECONSIDERATION

This Request for Reconsideration is submitted in response to the Office Action mailed March 28, 2001 (Paper No. 13) having a three month shortened statutory period for response. A one-month extension of time through Monday, July 30, 2001 accompanies this Request as does a Supplemental Declaration of James Golinveaux.

The Examiner is respectfully requested to reconsider the arguments raised in Applicants' prior Amendment of February 2, 2001 (dated January 30, 2001).

In the reply of the Examiner (set forth in paragraph 4 of the DETAILED ACTION) to Applicants' argument that Tramm does not describe any complete sprinkler embodiment other than a 5.6 K factor sidewall sprinkler, the Examiner continues to argue that Tramm teaches a formula for K-factors and K factors of specific "ranges" (at least 3.5, 5.0, 7.0, 10.5, or 13) and further teaches to apply the "concept" to horizontal sprinklers having a larger or smaller values for K-factor 5.6.

The recited range of K factors and the suggestion "to apply the concept to horizontal-type

sprinklers having smaller or larger values for K-factor than 5.6" quoted by the Examiner from Tramm are undercut by a qualification in column 5 of the Tramm patent that follows the quotation relied upon by the Examiner, a qualification that the Examiner has chosen to ignore. In particular, the next paragraph of Tramm, col. 5, lines 44-56 states:

The horizontal-type sprinkler of this invention is frequently referred to as being of the "standard coverage" variety. That is, the area to be protected by the sprinkler, and the minimum flow rate of fluid to be discharged by the sprinkler, as well as allowable locations and distances between sprinklers, are specifically prescribed in installation standards such as the NFPA-13 previously mentioned. **However, the concept of this invention can be applied to horizontal-type sprinklers *specially listed for other protection areas, minimum flow rates, and/or locations and distances between sprinklers when found suitable for use by a listing organization acceptable to the authority having jurisdiction.*** (Emphasis added.)

Thus, even Tramm does not teach or suggest that his 5.6 K factor sprinkler would work acceptably if modified in orifice size. Nor is Tramm teaching or suggesting that other sprinklers be modified in orifice size. When considered as a whole, it is clear that Tramm does not identify or disclose, and does not purport to identify or disclose, any operational sprinkler beyond the 5.6 K-factor sprinkler which is described in detail in that patent. Tramm specifically refers others to the listing organizations for an identification of other sidewall sprinklers to which the concept of his invention may be applied. Tramm does not purport to provide an enabling disclosure of either an extended coverage sidewall sprinkler or of a "standard coverage" sidewall sprinkler having a K-factor greater (or smaller) than 5.6. He merely indicates his invention can be adapted to sprinklers of different sizes and capabilities, old and new and yet to be designed.

Next, the Examiner has rejected of Mr. Golinveaux' statement that no manufacturer has

successfully fire tested or developed an orifice size larger than $17/32^{\text{nd}}$ inches and a K-factor greater than 8.0 for a sidewall sprinkler as unsupported and not reflective of "global industry knowledge". If by "global knowledge" the Examiner means knowledge by anyone anywhere in the world, such knowledge is not relevant at all to his position unless it constitutes prior art under one or more paragraphs of 35 U.S.C. 102. Such knowledge is further not relevant with respect to the patentability of the sprinklers of this application unless the Examiner can cite it. MPEP 2144.03.

Mr. Golinveaux has reaffirmed his earlier statement that the sprinklers of the present application were the first and still the only sidewall sprinklers known to ever be built and successfully fire tested with a K factor greater than 9 or for extended coverage ordinary hazard protection and the first and still the only to be listed or approved by any independent, recognized testing organization of at least that orifice size (K-factor greater than 9) or for that level of protection extended coverage ordinary hazard). (Supp. Declaration of Golinveaux ¶ 7.) The Examiner is hereby called upon to identify one actual or purportedly operational sidewall sprinkler from anywhere in the world (other than applicants), or a published writing reporting the existence of such sprinkler, with a K factor greater than 8 gpm/(psi^{1/2}) or with any orifice size and asserted to provide extended coverage ordinary hazard protection.

Furthermore, reconsideration of Mr. Golinveaux' statement in light of his new position is warranted. As Mr. Golinveaux' Supplemental Declaration states, he is now Vice President of Research and Development for Tyco Fire Products LP, the largest automatic fire sprinkler manufacturer in the U.S. and the world. He and the people who report to him do, in fact, have a global knowledge of the industry. He and the people who report to him are responsible for

supporting a world wide automatic fire sprinkler business and for having knowledge of each country having any automatic sprinkler regulatory standards or requirements, including any qualifying testing, as well as competitive developments in those countries. He is therefore in a position to know of what he states. (Supp. Declaration of Golinveaux ¶¶ 3-4.) Mr. Golinveaux' statements regarding the sidewall sprinklers of the present application and the lack of prior art or other sprinklers like those of the present application stand unrefuted.

In any event, it is not even necessary that Mr. Golinveaux have a global knowledge of sidewall sprinklers. It is merely enough for the present application that he can verify on behalf of Grinnell Corporation, the owner of both of the patents relied upon by the Examiner, that neither Grinnell Corporation nor either of the two inventors of those patents ever built or tested or disclosed or had built or tested or disclosed any sidewall sprinkler having a K-factor greater than 9 or any extended coverage ordinary hazard sidewall sprinkler. (Supp. Declaration of Golinveaux, ¶¶ 2 and 5.) Therefore, those of ordinary skill in the art would also know that the only sidewall sprinklers ever disclosed by Grinnell or by either inventor identified in the two patents being relied upon by the Examiner, had K-factors less than 9 and were either extended coverage residential or light hazard like Fischer or standard coverage like Tramm but not extended coverage ordinary hazard sidewall sprinklers as claimed. When the prior art is taken as a whole, including what is known not to have been taught or suggested by the inventors and owners of the cited references, as well as what is in the cited references, one of ordinary skill in the art would know that neither cited reference and neither inventor of those references teaches or discloses or suggests any operational extended coverage ordinary hazard sidewall sprinkler or any operational sidewall sprinkler having a K factor greater than 9.

With respect to the Examiner's comment that "UL or FM test requirements do not appear to be claimed limitations", the issue is not what the claims teach but what the prior art teaches to one of ordinary skill in the art at the time of the invention. In the action of August 30, 2000, (Paper No. 10), the Examiner asserted that "(I)t would have been obvious to one of ordinary skill in the art ... that the coverage area is dependent on the fluid pressure, and therefore, any coverage area less than 16 ft x 24 ft can be attained by reducing the pressure (or increasing the K-factor)" Applicant replied that while the coverage area might shrink, it was not certain whether any UL or FM test requirement would be met for any lesser distribution.

The existence or non-existence of a UL or FM test requirement has nothing to do with a requirement for such testing in applicants' claims. It has to do with the assertions of the Examiner as to what is obvious to one of ordinary skill in this art. Each of the two relied upon patents discloses a type of performance (extended coverage residential light hazard for Fischer and standard coverage for Tramm) that is governed by NFPA 13 and would be confirmed by UL or FM testing. Neither discloses the type of performance being claimed (extended coverage ordinary hazard). As Mr. Golinveaux notes, no test procedures were in existence at either laboratory before applicants' approached UL for testing and listing of the subject sprinklers; a set of test procedures were created at UL for the purpose of testing the sprinklers of the present application; and there still are not any tests procedures in place at any approving or listing laboratory anywhere in the world except UL in the U.S. and ULC in Canada. (Supp. Declaration of Golinveaux, ¶ 6.)

This point extends to the Examiner's continued reliance on *In re Aller* while responding to only one of Applicants' several arguments for the inapplicability of that reference, namely the

cost of testing. The Examiner fails to address the issues that in order for performance tests to be accepted by the art, they had to be approved, if not actually performed, by a third party testing organization, that there were no known tests designed to demonstrate ordinary hazard extended coverage sidewall sprinkler fire protection until they were created to test applicants' invention, and that one of ordinary skill would build sprinklers for which test standards had already been established, such as the standards under which the sprinklers of Fischer and Tramm had been tested, and not for performances for which no test standards had been conceived and which had never been previously successfully demonstrated. The latter is anything but routine experimentation.

Next, the Examiner has failed to provide an adequate motivation to make the combination asserted. The Examiner asserts that it would be obvious to provide Fischer with "the range of K factors as taught by Tramm" to provide a specific flow rate depending on pressure. First, Tramm does not teach making the same sprinkler in various sizes. Tramm teaches his invention, the strengthening of a deflector under vertical loads, in a standard orifice sprinkler embodiment having a 5.6 K-factor and indicates that his invention can be used in other sprinklers including those of other orifice sizes and performances, reciting the standard definition for K-factor to explain what that term means with respect to orifice size. Nowhere do Tramm or Fischer teach or suggest providing one sprinkler with merely different K-factors to provide a specific flow rate depending on pressure. Each, in fact, describes a different sprinkler configured for a specific performance, neither of which is the performance being claimed. The teaching or suggestion to make the claimed combination must be found in the prior art itself and not be based on applicants' disclosure. MPEP 2142; *In re Vaeck*, supra. The Examiner's entire line of proposed

experimentation to try to achieve a performance first achieved by applicants and nowhere mentioned or suggested by the prior art is unsupported by that art.

Finally, the prior art references must teach or suggest all of the claim limitations. MPEP 2142; *In re Vaeck*. Even assuming for argument purposes that Tramm does teach a K-factor greater than 9, neither reference teaches or suggests the specific provision of extended coverage ordinary hazard fire protection with a sidewall sprinkler. The only teaching or suggestion for that comes from the present application.

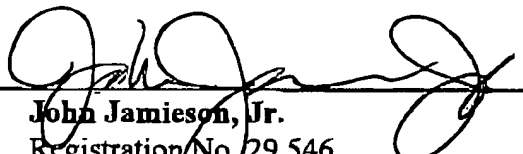
Furthermore, the ability to provide extended coverage ordinary hazard protection with a sidewall sprinkler is a property that has not been shown to be possessed by the prior art and is evidence in and of itself of non-obviousness. MPEP 716.02(a); *In re Papesch*, 315 F.2d 381; 137 USPQ 43 (CCPA 1963).

For at least the foregoing reasons, request for reconsideration and withdrawal of the rejections are respectfully requested.

Respectfully submitted,

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(Date)

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